

AMENDMENTS TO THE CLAIMS

This listing of the claims supersedes all previous listings.

1. (currently amended) A method for facilitating ~~an open a collaborative~~ simulation between a first simulation engine and at least a second simulation engine, wherein said simulation engines are communicatively coupled together with a simulation portal over a computer network, said method comprising ~~the steps of:~~

creating said simulation portal openly accessible to said first and second simulation engines connected to said computer network;

accepting a connection to said simulation portal by each of said first simulation engine and said second simulation engine;

receiving a simulation output file from said first simulation engine;

storing said simulation output file as part of ~~a~~ the simulation in a data storage area associated with said simulation portal, said output file available to all simulation engines participating in the simulation; and

providing said simulation output file upon request to at least said second simulation engine.
2. (currently amended) The method of claim 1 wherein said creating said simulation portal step further comprises ~~the steps of:~~

creating said simulation portal using XML; and

configuring said simulation portal to allow connections from each of said simulation engines connected to said computer network.

Claims 3-5 cancelled.

6. (original) The method of claim 1 whereby said data storage area manages simulation output files for multiple simulations running contemporaneously.
7. (currently amended) The method of claim 1 wherein said accepting a said connection step further comprises:
verifying said connection with a username and password combination.

Claim 8 is cancelled.

9. (currently amended) A system for performing simulations wherein a first simulation engine and at least a second simulation engine are communicatively coupled together with a simulation portal over a computer network, said system comprising:
means for creating said simulation portal;
means for accepting connections to said simulation portal from each of said first simulation engine and said second simulation engine;
means for receiving a one or more simulation output files from said first simulation engine;
means for storing said simulation output files as part of a simulation in a data storage area associated with said simulation portal, said output files available to any simulation engine participating in the simulation; and
means for providing said simulation output files upon request to at least said second simulation engine.

10. (original) The system of claim 9 whereby said means for creating said simulation portal include creating said simulation portal in XML.

11. (currently amended) The system of claim 9 whereby said means for accepting connections includes verifying said connections with a username and password combination.

12. (currently amended) A computer program product embodied on computer readable medium usable by a processor, the medium having stored thereon a sequence of instructions which, when executed by said processor, causes said processor to execute a method for facilitating an open-a collaborative simulation between a first simulation engine and at least a second simulation engine, wherein said first and said second simulation engines are communicatively coupled with a simulation portal over a computer network, said computer program product comprising:

instructions for making said simulation portal openly accessible to said simulation engines over said computer network;

instructions for accepting a connection to said simulation portal from each of said first simulation engine and said second simulation engine;

instructions for receiving a simulation output file uploaded from at least said first simulation engine;

instructions for storing said simulation output file uploaded from said first simulation engine as part of a simulation in a data storage area associated with said simulation portal, said output file available to any simulation engine participating in the

simulation; and

instructions for providing said simulation output file to at least said second simulation engine upon request.

Claims 13-15 are cancelled.

16. (currently amended) The computer program product of claim 12 wherein said instructions for storing, further comprise instructions for managing simulation output files for multiple simulations running contemporaneously.

17. (currently amended) The computer program product of claim 12 wherein said instructions for accepting a said connection, further comprise instructions for verifying said connection with a username and password combination.

Claim 18 is cancelled.

19. (currently amended) A method for optimizing the components in a system design comprising the steps of:

creating a simulation portal that is openly accessible over a computer network;

publishing a system design specification model;

accepting a connection to said simulation portal from each of a plurality of design teams communicatively coupled together with said simulation portal over said computer network;

receiving a simulation output file from at least one of said plurality of design

teams connected to said simulation portal;

storing said simulation output files as part of a simulation in a data storage area associated with said simulation portal;

providing at least one of said simulation output files to at least one other of said design teams connected to said simulation portal; and

selecting the optimal components for said system design based on a comparison of said simulation output files.

20. (currently amended) The method of claim 19 wherein said-accepting said a connection step further comprises verifying said connection with a username and password combination.

21. (new) The method of claim 19 wherein said design teams are not connected to the simulation portal at the same time.

22. (new) The method of claim 19, further comprising terminating said connection to said simulation portal from any of said plurality of design teams upon request.

23. (new) A simulation portal comprising:

a data storage repository, capable of storing data associated with each of a plurality of simulations;

a communications server, allowing a plurality of simulation engines to connect to the portal and to participate in one or more of the plurality of simulations; and

a simulation controller, managing and synchronizing communications between the participating simulation engines,

the portal being created dynamically.

24. (new) The portal of claim 23, wherein the simulation controller manages simulation data for multiple simulations running contemporaneously.

25. (new) The portal of claim 23, wherein the data associated with each simulation includes a synchronization file to allow the participating simulation engines to match timing steps, said data associated with each of the simulations available to any simulation engine participating in the simulation.

26. (new) The portal of claim 25, wherein the associated synchronization file is update by each simulation engine participating in the simulation as it simulates.

27. (new) The portal of claim 23, wherein the plurality of simulation engines includes any web enabled engine.

28. (new) The portal of claim 23, wherein the simulation controller verifies a username and password combination.

29. (new) The portal of claim 23, wherein the communication server allows each simulation engine to disconnect from the portal upon request.

30. (new) The portal of claim 23, wherein the plurality of simulation engines are not connected to the portal at the same time.

31. (new) The portal of claim 23, wherein the portal is terminated dynamically, by writing programming files and executing those files.

32. (new) The portal of claim 23, wherein the programming files are written in XML.

33. (new) The portal of claim 23, wherein the communications between the participating simulation engines and the portal uses XML.

34. (new) The portal of claim 23, wherein the portal is created by an entity not participating in the simulation.

35. (new) A method for conducting a collaborative simulation of a circuit design, comprising:

a) creating a portal, the portal created dynamically by writing programming files in XML and executing those files;

b) granting access to the portal to a plurality of simulation engines;

c) receiving a simulation output file associated with a first portion of the circuit design from a first of said plurality of simulation engines;

d) storing the simulation output file in a storage area, said output file available to any of said plurality of simulation engines;

e) sending the simulation output file to each of said plurality of simulation engines upon request, at least a second of said plurality of simulation engines performing a simulation for a second portion of the circuit design using the output file as input; and

f) repeating c) through e) until the circuit design has been simulated.

36. (new) The method of claim 35, further comprising, g) terminating the portal by executing one or more XML statements.

37. (new) The method of claim 35, wherein the storage area includes a synchronization file associated with the simulation to allow participating simulation engines to match timing steps.
38. (new) The method of claim 37, wherein the synchronization file is updated by each simulation engine as it simulates.
39. (new) The method of claim 35, wherein each simulation engine terminates access to the portal after its output file is received.
40. (new) The method of claim 35, wherein the portal is created by an entity not participating in the simulation.
41. (new) The method of claim 35, wherein the portal is created by an entity participating in the simulation.
42. (new) The method of claim 35, wherein granting access to the portal comprises verifying a username and password combination.
43. (new) The method of claim 35, wherein the simulation output file includes an industry standard output format.
44. (new) The method of claim 35, wherein the simulation output file includes a vendor specific output file format.
45. (new) The method of claim 35, wherein receiving the simulation output file includes receiving output files from multiple simulations running contemporaneously.
46. (new) A simulation system comprising:

a portal, the portal comprising a storage area to store data associated with each of a plurality of simulations;

a plurality of simulation engines in communication with the portal, each of the plurality of simulation engines associated with at least one of the plurality of simulations,

the plurality of simulation engines able to send to the portal data associated with one or more of the plurality of simulations and able to receive from the portal any data from the associated simulations, the data including simulation output files.

47. (new) The system of claim 46, wherein the plurality of simulation engines are not in communication with the portal at the same time.

48. (new) The system of claim 46, wherein the communications with the portal uses XML.

49. (new) The system of claim 46, wherein the communications with the portal requires the verification of a username and password combination.

50. (new) The system of claim 46, wherein the data associated with the simulation includes a synchronization file to allow simulation engines participating in the simulation to match timing steps.

51. (new) The method of claim 46, wherein the synchronization file is updated by each simulation engine as it simulates.

52. (new) A simulation system comprising:

a portal, the portal comprising a storage area to store data associated with each of a plurality of simulations;

a plurality of simulation engines in communication with the portal, the plurality of simulation engines including any web enabled simulation engine.